

CLAIMS

The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

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1. An eluter instrument for an SPE system, comprising:

- (a) a housing;
- (b) an upper seal mounted in said housing for up and down motion with respect thereto;
- (c) a lower seal mounted in said housing for up and down motion with respect thereto; and
- (d) said upper seal and said lower seal being moveable between a first position in which said upper seal and said lower seal are spaced apart and not in proximity and a second position in which said upper seal and said lower seal are in proximity and spaced apart sufficiently only to clamp therebetween a first area of a plurality of areas of an SPE medium, said first area containing therein one or more compounds of interest, such as to permit elution of said one or more compounds of interest to another instrument.

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2. An eluter instrument for an SPE system, as defined in Claim 1, wherein: said upper seal and said lower seal are O-rings.

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3. An eluter instrument for an SPE system, as defined in Claim 1, wherein: said upper seal and said lower seal engage surfaces of a dam formed around said first area.

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4. An eluter instrument for an SPE system, as defined in Claim 3, wherein: said dam is formed by heat-sealing a portion of said SPE medium.

5. An eluter instrument for an SPE system, as defined in Claim 1, further comprising: apparatus to automatically move said SPE medium and clamp a

second area of said SPE medium between said upper seal and said lower seal.

6. An eluter instrument for an SPE system, as defined in Claim 5, wherein: said apparatus includes first and second stackers for stacking a plurality of frames containing a plurality of SPE media such that said frames can be fed in and out of an elution station automatically without operator handling.

7. An eluter instrument for an SPE system, as defined in Claim 1, further comprising: a first frit disposed above said first seal and a second frit disposed below said second seal, said first frit and said second frit to distribute eluent solvent across said first area.

8. An eluter instrument for an SPE system, as defined in Claim 6, further comprising: means for reading identifying indicia on said frames, combined with software, to generate a data audit trail of each incoming said frame, with processing parameters for each frame contained in said identifying indicia.

9. An eluter instrument for an SPE system, comprising:

- (a) a housing;
- (b) a plurality of upper seals mounted in said housing for up and down motion with respect thereto;
- (c) a plurality of lower seals mounted in said housing for up and down motion with respect thereto;
- (d) said upper seals and said lower seals being moveable between a first position in which said upper seals and said lower seals are spaced apart and not in proximity and a second position in which said upper seals and said lower seals are in proximity and spaced apart sufficiently only to clamp therebetween a plurality of areas of an SPE medium, said plurality of areas containing therein one or more compounds of interest, such as to permit elution of said one or more compounds of interest to another instrument; and
- (e) valving to selectively and sequentially select one of said plurality of

areas from which to elute said one or more compounds of interest.

10. An eluter instrument for an SPE system, as defined in Claim 9, wherein:
said valving is automatically controlled to select one of said plurality of areas
from which to elute said one or more compounds of interest.